AMC's FSS Leveling Policy - How to Include in the Air Force's Requirements System

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Air Mobility Command's (AMC) Forward Supply System (FSS) provides supply support for enroute strategic airlift engaged in global deployment, sustainment and reconstitution of forces. AMC uses Forward Supply Locations (FSL) to provide supply support to the enroute strategic airlift system and historically has centrally (at HQ AMC) computed levels for each FSL based on system wide failures and repair capability enroute. These HQ AMC-computed levels were then loaded at the FSL and forwarded to Air Force Materiel Command (AFMC) in the form of adjusted stock levels. These levels guided the distribution of spares to the different FSLs in an attempt to prevent downed aircraft within the enroute network. The Air Force Logistics Management Agency (AFLMA), in its report, Forward Supply System Forward Supply Locations (FSL) Inventory Policy Review (LS 199713500), reviewed the previous AMC leveling method and considered alternatives using an AFLMA developed simulation model.

Because AMC operates a supply system separate from the Air Force requirements system, they have been forced to develop workarounds to the Air Force standard requirements and leveling system in order to determine FSL levels and ensure their requirements are included as Air Force requirements. These efforts have not always been successful, leading to the need to integrate AMC FSL support into the Air Force requirements system and to do so in a way that meets AMC needs.

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EXECUTIVE SUMMARY

Problem:

Air Mobility Command's (AMC) Forward Supply System (FSS) provides supply support for enroute strategic airlift engaged in global deployment, sustainment and reconstitution of forces. AMC uses Forward Supply Locations (FSL) to provide supply support to the "enroute" strategic airlift system and historically has centrally (at HQ AMC) computed levels for each FSL based on system wide failures and repair capability enroute. These HQ AMC-computed levels were then loaded at the FSL and forwarded to Air Force Materiel Command (AFMC) in the form of adjusted stock levels. These levels guided the distribution of spares to the different FSLs in an attempt to prevent downed aircraft within the enroute network. The Air Force Logistics Management Agency (AFLMA), in its report, *Forward Supply System – Forward Supply Locations (FSL) Inventory Policy Review"* (LS 199713500), reviewed the previous AMC leveling method and considered alternatives using an AFLMA developed simulation model.

Because AMC operates a supply system separate from the Air Force requirements system, they have been forced to develop workarounds to the Air Force standard requirements and leveling system in order to determine FSL levels and ensure their requirements are included as Air Force requirements. These efforts have not always been successful, leading to the need to integrate AMC FSL support into the Air Force requirements system – and to do so in a way that meets AMC needs.

Objectives:

1. Determine if the new AFLMA proposed policy can be, should be and how it can be incorporated into the Air Force Requirements System, to include:

   -Readiness Based Leveling (RBL) – computing and allocating reparable levels to the FSLs.

   -Recoverable Consumption Item Requirements System (D041) – including efficient FSL reparable requirements accurately in the Air Force Requirements System.

   -Base (FSL) leveling procedures – how to compute, load and maintain levels in the base level system.

   -HQ AMC actions – what procedures are necessary to oversee the process.

2. Develop and test procedures and programs.

Analysis/Results:

Both AMC/LG and the Air Force Supply Executive Board (AFSEB) approved implementing the AFLMA proposed FSL leveling algorithm into the standard Air Force requirements (D041) and leveling (RBL) system. In this report, we document the leveling

algorithm (to include some AMC proposed modifications) and document the actions necessary to implement the new system in April 1999.

The addition of the AFLMA proposed algorithm into RBL improves the Air Force Requirements System (4.6 percent increase in aircraft availability at 18.6 percent less stockage cost) and meets AMC's needs:

-AMC continues to have the ability to set their own requirements when necessary—FSL ASLs override RBL levels.
-FSL levels allocation and requirements are now included in the Air Force requirements system for reparable assets.
-A performance measurement system will be in place to ensure the new system performs as expected.

Conclusions:

1. Readiness Based Leveling (RBL) has the ability and is scheduled to compute FSL levels using the new AFLMA proposed AMC FSL leveling policy for the April 1999 RBL push.

2. The new leveling policy:
-Increases C-5 aircraft availability by 4.6 percent at 18.6 percent less stockage cost than the current system.
-Incorporates AMC FSLs into the Air Force Requirements System, eliminating the need for AMC to compute its own levels for Air Force managed, reparable (XD) items.

Recommendations:

1. Implement the new FSL leveling policy into RBL. **OPR: AFMC/LGI OCR: AMC/LGS**
-RBL push levels to the FSLs.
-RBL will complete the FSL requirement and pass it to D041.

2. Develop performance measures to ensure RBL meets AMC needs. **OPR: AFLMA/LGS**

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CHAPTER 1

INTRODUCTION

PROBLEM

Air Mobility Command's (AMC) Forward Supply System (FSS) provides supply support for enroute strategic airlift engaged in global deployment, sustainment and reconstitution of forces. AMC uses Forward Supply Locations (FSL) to provide supply support to the "enroute" strategic airlift system and historically has centrally (at HQ AMC) computed levels for each FSL based on system wide failures and repair capability enroute. These HQ AMC-computed levels were then loaded at the FSL and forwarded to Air Force Materiel Command (AFMC) in the form of adjusted stock levels. These levels guided the distribution of spares to the different FSLs and FSPs in an attempt to prevent downed aircraft within the enroute network. The Air Force Logistics Management Agency (AFLMA), in its report, *Forward Supply System – Forward Supply Locations (FSL) Inventory Policy Review"* (LS 199713500), reviewed the previous AMC leveling method and considered alternatives using an AFLMA developed simulation model.

Because AMC operates a supply system separate from the Air Force requirements system, they have been forced to develop workarounds to the Air Force standard requirements and leveling system in order to determine FSL levels and ensure their requirements are included as Air Force requirements. These efforts have not always been successful, leading to the need to integrate AMC FSL support into the Air Force requirements system – and to do so in a way that meets AMC needs.

OBJECTIVES

1. Determine if the new AFLMA proposed policy can be, should be, and how it can be incorporated into the Air Force Requirements System, to include:

   - Readiness Based Leveling (RBL) – computing and allocating reparable levels to the FSLs.

   - Recoverable Consumption Item Requirements System (D041) – including efficient FSL reparable requirements accurately in the Air Force Requirements System.

   - Base (FSL) leveling procedures – how to compute, load and maintain levels in the base level system.

   - HQ AMC actions – what procedures are necessary to oversee the process.

2. Develop and test procedures and programs.

BACKGROUND

AMC's Forward Supply System (FSS) provides centralized supply support to their strategic airlift enroute Forward Supply Locations (FSL). These FSLs are divided into categories based on their mission throughput (take-offs and landings) and maintenance (repair) capability at the FSL. FSL stockage is limited to only mission essential (grounding) items for which the FSL has remove and replace repair capability. AMC considers the FSLs to be its top support priority. AMC will use any and all means to replenish an FSL stock level (e.g., pull an asset from an RSP at the Primary Supply Point (PSP)).

In addition to AMC centrally computing FSL levels, their system is also separate from the rest of the Air Force. AMC accomplishes most of the unique FSL functional requirements with their own, MAJCOM developed programs on MAJCOM unique hardware. As an example of their unique process, FSL replenishment requirements are sent to the PSP, not to the depot. AMC's FSS goal is to meet the supply support needs of its strategic airlift aircraft within the enroute system.

The fact that AMC operates a supply system separate from the Air Force requirements system has often led to support problems and AMC has been forced to develop workarounds in order to ensure their requirements are included as Air Force requirements. These efforts have not always been successful, leading to the need to integrate AMC into the Air Force requirements system and RBL.

FSL Requirements

AMC computes the FSL requirements and loads them as fixed adjusted stock levels (ASLs). HQ AMC provides a quarterly list (72M Report) to AFMC of all fixed FSL ASLs. The 72M Report provides the documentation AFMC inventory management specialists (IMS) need to include these requirements in the Air Force standard requirements system (D041). However, the AMC ASL system is a different process from the rest the Air Force uses and has not been entirely successful. The AMC FSL requirement does not always get included in the worldwide requirement. On 23 July 1998, we identified 85 FSL NSNs where the worldwide requirement was smaller than just the FSL ASLs, not even counting the non-FSL requirements. In January 1999, there were still 36 FSL RBL problem items. Through the AFMC Requirements Team and AMC's efforts, the situation has improved, but there are still FSL requirements not included in the worldwide requirement.

FSL Levels

Currently, RBL is the Air Force system to determine reparable item base levels. RBL allocates the D041 worldwide peacetime requirement to bases and the depot to minimize worldwide expected backorders. RBL ensures the worldwide sum of levels equals the requirement. In determining the optimal allocation of the worldwide requirement, RBL uses base data including daily demand rate, repair cycle time, percent of base repair, order and ship time, not reparable this station (NRTS) condemnation time, and C-factor (safety level modifier)

to allocate levels. RBL chooses the allocation that minimizes the worldwide expected backorders (EBOs). There are, however, considerations that need to be addressed to determine exactly how RBL should allocate levels to FSLs.

AFLMA report *LS199710500 - Forward Supply System – Forward Supply Locations (FSL) Data and Requirements Pass* found that although FSLs are currently excluded from RBL, the data necessary to allocate RBL levels is available. That study recommended a change to the current method of handling FSL ASLs, which continues to ensure that these levels are "filled off the top" but includes the FSLs in RBL. The FSLs would report their ASLs to RBL and RBL would allocate levels to the FSLs via an XCA transaction. These levels would be identified to RBL as FSL adjusted stock levels and would be allocated prior to any other level. For situations where the requirement is insufficient to cover all ASLs and base pipeline requirements, the FSL ASLs would be allocated first and RBL would provide a notice (requirements too small) to the IMS for correction. AMC would retain the ability to reallocate ASLs (and their corresponding RBL level) at any time. Any changes in the individual FSL's levels would be reported to RBL and RBL would allocate to satisfy the new ASLs.

That study went on to explain that AMC still receives priority for their FSL ASL level allocation and maintains the flexibility of adjusting these ASLs to meet specific changes in AMC mission requirements. The added benefit of running these ASLs through RBL is that AMC can take advantage of RBL's automated identification and correction of requirements problems (inaccurate ASLs and/or D041 requirements) and establish visibility and audit trails within RBL. Because of ASL data inconsistencies between the FSL and RBL, AMC chose for RBL not to allocate levels to its FSLs. Instead, RBL subtracts the FSL (AMC-computed fixed ASL) requirements and allocates the remaining worldwide requirement to the non-FSL bases. So, although RBL does not allocate individual levels to the FSL, the FSL requirements are "allocated" (taken off the top) of what RBL does allocate.

Study Efforts

AMC's FSS remains distinct from the Air Force requirements and leveling system. The AFLMA proposed an improved method to determine FSL requirements and levels. In this study, we seek to embed the AFLMA recommended requirements and leveling algorithm into the standard Air Force requirements (D041) and leveling (RBL) system.

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CHAPTER 2
ANALYSIS

INTRODUCTION

AFLMA study LS199713500 – *Forward Supply System – Forward Supply Location (FSL) Inventory Policy Review*, analyzed AMC's current method for computing levels throughout their enroute system. The AFLMA study recommended a new policy be established for how AMC computes levels and requirements for the FSLs. That study also recommended that the new logic be incorporated into the Air Force Requirements System – RBL and D041. Specifically, that the more efficient, statistically derived method to compute FSL requirements feed the D041 as worldwide requirements and also that RBL allocate those levels. This would essentially mean AMC would not have to compute FSL requirements for reparable items and attempt to force-feed them into the Air Force Requirements System.

METHODOLOGY

This study seeks to design system changes to the Air Force Requirements System (RBL, D041 and the SBSS) needed to implement the AFLMA's proposed new AMC FSL leveling algorithm, to code the system changes required, and to provide those changes to AFMC. In addition, the study will determine procedural changes needed to feed AMC's requirement to D041, handle contingencies that might arise, discuss AMC actions, and test the new system to ensure the new algorithm works in RBL.

ANALYSIS

The New Reparable Item Algorithm

As stated above, AFLMA study LS199713500 recommended AMC adopt a new leveling policy. In December 1998, AFLMA met with HQ AMC/LGS personnel to review and discuss some concerns AMC had regarding the new policy. At that meeting, it was decided to further analyze two AMC proposed changes to the AFLMA recommended policy. The new policy algorithm is summarized below with a detailed explanation in Appendix A.

1. The AFLMA recommended policy (see AFLMA Report LS199713500) provided levels to all the FSLs in a category if there were at least 2 demands at FSLs in the category. As a result, it was possible (and occurred a few times) to not have levels at Category 1 locations and have levels at lower category FSLs. AMC felt, and our subsequent analysis confirmed, that placing the levels at the Category 1 FSLs would yield better results (fewer backorders) than stocking them at the lower category FSLs even when they had demand. We tested the proposal to reallocate levels from the lower category to the Category 1 FSLs and guaranteeing at least a level of 1 at each Category 1 FSL. Table 2-1 provides the results.

Leveling Policy	Avg Stock Cost ($M)	# of B/Os	Downed A/C Days	Downtime Cost ($M)
Current AMC Policy	$51.42M	2697	2324	$23.40M
Original AFLMA Proposed Policy	$40.43M	2664	2316	$23.32M
AFLMA/AMC Policy	$41.88M	2445	2216	$22.31M

Table 2-1
Comparison of Leveling Policies (C-5)

The Category 1 FSLs have more activity (take-offs and landings) and therefore have a higher probability of a future need for the part. As Table 2-1 shows, guaranteeing at least a level of one at the Category 1 FSLs increased the stockage cost slightly but decreased backorders (219) and downed aircraft days (100) from the original AFLMA proposed policy. Note the AFLMA/AMC policy has significantly less stockage cost than the current AMC policy ($9.54M less stockage cost).

2. AMC asked whether there was a way to phase in the new AFLMA recommended levels. They noted *the reduction in average stock cost is not really an inventory savings*. If those items are already purchased and available (and certainly for the C-5 and C-141 weapon systems there is a high likelihood they are available), why shouldn't the Air Force take advantage of those assets. And if the assets are available, they should be placed in the enroute locations—which are the higher priority. So we modified the leveling logic to use two algorithms. First, to use AFLMA proposed policy (as modified above) as the primary leveling algorithm and *also as the algorithm to determine the requirement to pass to D041*. We then developed a secondary algorithm—basically the current AMC leveling algorithm—*which will only be used if there are sufficient assets available to fill the non-FSL Air Force needs*. D041 is an asset-based computation, so available assets are included in the requirement even where they wouldn't be if the assets had to be bought. The new RBL algorithm then will use any of the D041 requirement remaining after allocating the expected pipeline to the non-FSL users to allocate to FSLs beyond the AFLMA proposed "primary" algorithm up to the current AMC "secondary" algorithm.

The FSL leveling algorithm (with the two changes noted above) is summarized as follows:

1. Two Year Demand Accommodation. If DDR = 0, yet 0 < Days Since Last Demand (DSLD) <= 730, then set DDR = 1/365

2. Primary Algorithm Summary.

a. For NSNs under $10K. In computing the demand level, a "C" factor of 2 is used, allowing for more levels of cheaper parts. The largest individual demand level is applied to all FSLs in the same or higher category.

b. For NSNs above $10K. A total allocation requirement is determined and then allocated to the FSLs in a priority sequence. The allocation requirement is determined summing the SRAN projected needs. For NSNs between $10K and

$45K, a "C" factor of 1 is used in the demand level formula and there must be at least 2 category demands to apply the category level to all SRANs in determining its need. For NSNs over $45K, a "C" factor of 1 is used and no category level is used. That is, only the individual SRAN's demand level is used for each SRAN. Once the individual SRAN projected need is determined, it is summed to find the allocation requirement. An additional amount may be added to ensure all category 1 FSLs receive a level. This allocation requirement is then allocated to the FSLs. First, the same level is given to all FSLs (i.e., an allocation requirement of 26 would give 2 levels to each of the 11 FSLs, leaving a remainder of 4 levels to allocate). Then, the remainder is allocated first to the Cat 1s, starting with the FSL with the most demands. Then the Cat 2s, then Cat 3s. Within a category, the FSL with the most demands gets the level before the one with the fewest.

3. Secondary Algorithm Summary. A second leveling algorithm is also applied which is equivalent to the existing AMC algorithm. In this algorithm, the demands are summed and a demand level is computed on the total demands for the FSS. This is then prorated to the categories based on the number of category demands. Next, the category level is prorated to each FSL always rounding up. Finally, a check is made to ensure the FSL receives the larger of its individual demand level and the prorated level.

4. Final Level Determination. The primary algorithm's level is the starting point. If the secondary algorithm is higher, an attempt is made to give additional levels up to the secondary level. To see if this can be done, the primary levels are subtracted from the D041 requirement. Then, the sum of all non-FSL users' pipelines is subtracted. This ensures there is some requirement left for other than FSL users. If a positive value remains after the subtraction, it is used to bridge the gap from the primary to secondary levels. Since the FSLs already have a level, these are allocated in a sequence determined by the difference between the levels divided by the primary level plus category number (a deepest hole type logic).

New Algorithm Conclusions

Both changes to the FSL leveling algorithm are based on sound logic; place stock at the higher category FSL with more likelihood of future use and take advantage of existing assets. And they improved performance.

For the C-5, the AFLMA proposed policy with the AMC modifications achieves higher average availability (4.6 percent increase) at less cost (18.6 percent less stockage cost) than the current AMC leveling policy. Considering available stock will increase the FSL performance further.

Implementation Actions

The plan is to embed the new FSL leveling algorithm into RBL. RBL will then compute the FSL levels and push levels to the FSL. RBL will create FSL pseudo-adjusted stock levels

to feed to D041 via the AMC requirements (AMC REQ) file. An example of this output file is shown in Appendix D. So, RBL will both compute the FSL requirement (and feed the requirement to D041) and allocate RBL levels to the FSLs. HQ AMC will no longer have to compute reparable item FSL levels and FSLs will not have to load fixed ASLs. RBL will allocate levels that will replace the fixed FSL ASLs.

RBL will also provide reports to ensure the worldwide requirement meets AMC needs. That is, RBL will identify any "problem items" where the requirement is insufficient to meet the AMC enroute needs (as determined by the AFLMA proposed algorithm). As discussed above, RBL will also provide a way to identify available assets and increase FSL levels, so as to phase-in the new AFLMA proposed algorithm.

The plan is to reprogram RBL so it will allocate levels to the FSL for the April 1999 RBL push. Programming actions will be completed by 15 April 1999 and RBL will run on the 20th. RBL will provide a Central Leveling Summary (CLS) for AMC review and approval. After AMC approval of the RBL run, RBL will actually push levels to the FSLs at the end of April 1999.

Prior to RBL actually pushing levels to the FSLs, there are five actions that must be completed:

1. Develop and test "fail-safe" software for FSL ASLs - AMC requires the capability to make changes to RBL levels out-of-cycle. That is, AMC needs to be able to load an ASL and override RBL to support quick-reaction contingencies and also to correct RBL in the case of dirty data.

   In March 1999, AFMC implemented a fail-safe for the XE4 process to ensure FSL ASLs are honored by RBL and the Air Force Requirements System. If AMC loads an ASL larger than the existing RBL level or RBL loads a level that does not allocate at least the amount of the existing ASL, the SBSS will send an XE4 with an "I" to RBL. RBL will recompute the FSL level and reallocate upon receipt of the XE4. AMC and AFMC will test this program logic before 15 April 1999.

2. Agreement that ASLs are approved and fed to D041 – That is, an ASL input at an FSL will be reported as an approved requirement to RBL and then automatically fed to D041. This is no change to current policy. Appendix B provides a format for the report RBL will generate quarterly. The RBL generated "72M" report will provide by NSN the computed FSL requirement that was fed to D041. The report will also list (separately) any ASLs AMC approves beyond the computed FSL requirement.

3. Develop performance measures to ensure the system meets AMC needs – RBL will produce a "review" listing quarterly that will identify cases where the FSL requirement appears to be not included in D041. Both the materiel managers (MMs) and AMC will work the list to include those ASL requirements into D041. Appendix C provides a format for the RBL quarterly FSL Review Report.

4. Include the 2-year stop-stocking rule – The stop-stocking rule was identified in AFLMA Report LS199713500. Basically, the rule is to compute a level as long as there is a demand in the FSS within two years. Standard Systems Group (SSG) and AFMC implemented a change in Feb 99 to include the date of last demand (DOLD) on the XCB and to use the DOLD in RBL to allow the stop-stocking rule to take effect.

5. AMC and Air Force Supply Executive Board Approval – The AFLMA briefed AMC/LG and the AFSEB in January 1999 and both approved the recommendations to implement the new FSL leveling system. (See 65th AFSEB Minutes).

The new system can be summarized as follows:

1. AMC continues to have the ability to set their own requirements when necessary – FSL ASLs override RBL.
2. The FSL levels allocation and requirements are all now included within the Air Force requirements system for reparable assets.
3. A performance measurement system will be in place to ensure the new system meets AMC needs.

AFLMA Actions

AFLMA modified the RBL model to include the new leveling algorithm and provided the RBL code to AFMC so that RBL will allocate levels to the FSLs for the April 1999 push. Once the new RBL is run in mid-April, AFLMA will provide two Central Leveling Summaries (CLS) to AMC for their review and approval.

The first CLS will be the result of the actual production run of RBL and will be the levels centrally pushed (and AMC approved) this cycle. Those levels will include the current FSL ASLs loaded at the bases. The second CLS will be the result of the AFLMA test run and provide the levels without considering existing ASLs. So, the levels on this CLS are the levels the FSLs could receive based solely on the new AFLMA leveling algorithm.

Once AMC approves the new production model levels, RBL will push those levels that support current FSL ASLs. Then, once the new FSL levels are accepted, most of the FSL ASLs will be deleted and RBL will push the FSL levels in subsequent quarters based on the AFLMA algorithm. AMC will retain any ASLs they require above the new algrithm computed levels.

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CHAPTER 3
CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

1. Readiness Based Leveling (RBL) has the ability and is scheduled to compute FSL levels using the new AFLMA (with AMC modifications) proposed AMC FSL leveling policy for the April 1999 RBL push.

2. The new leveling policy:

   - Increases C-5 aircraft availability by 4.6 percent at 18.6 percent less stockage cost than the current policy.

   - Incorporates AMC FSLs into the Air Force Requirements System, eliminating the need for AMC to compute its own levels for Air Force managed, reparable (XD) items.

RECOMMENDATIONS

1. Implement the new FSL leveling policy into RBL. **OPR: AFMC/LGI OCR: AMC/LGS**

   - RBL push levels to the FSLs.
   - RBL will complete the FSL requirement and pass it to D041.

2. Develop performance measures to ensure RBL meets AMC needs. **OPR: AFLMA/LGS**

DISTRIBUTION: Refer to attached Standard Form 298.

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APPENDIX A
FSL LEVELING ALGORITHM IN RBL
ERRC XD

LEVELING CALCULATION

1. For each NSN, do steps 2-20.

2. Determine if NSN is on approved list. If so, continue to next step. If not, do the following
   a. Compute total Daily_Demand_Rate
   b. Print output in AMCLVLS file for NSN
   c. Print records for each FSL that has demands or ASLs
   d. End this NSN

3. Obtain NSN specific data
   a. MDS = Mission Design Series
   b. LAC = Latest Acquisition Cost
   c. Category = 1, 2, or 3 for each FSL based on the MDS
   d. Max_Category

4. For each FSL, obtain SBSS data.
   a. Use the DDR, RCT, OST, NCT, PBR as reported to D035E through XCB transactions.
   b. If DDR = 0 and 0 < Days_Since_Last_Demand (DSLD) < 730, make DDR = 1/365

PRIMARY ALGORITHM

5. For each FSL, calculate Anticipated_Required_Level (ARL)
   a. Pipeline = DDR * [(RCT*PBR + (1-PBR)*(OST+NCT)]
   b. Safety_Level = C * SQRT [3 * Pipeline]
      Where C = 1.0 if LAC > 10,000
      C = 2.0 otherwise
   c. Calculate the Pipe_Demand_Level (PDL) as follows:
   d. PDL = Pipeline + Safety_Level
   e. Calculate the Anticipated_Required_Level (ARL)

      ARL = 0 if DDR = 0.0

      ARL = Truncate (PDL + .9) if PDL < 1.0
      ARL = Truncate (PDL + .5) otherwise

Note: Repeat this step for all the FSLs

6. Find the total number of category demands and maximum category level for each category and roll-up from lower categories
   a. Category_Demands = Sum of DDR for all FSLs in this category
   b. Max_Category_Level = Max of ARL for all FSLs in this category

c. For category 2, Max_Category_Level is the larger of Max_Category_Level for category 2 and Max_Category_Level for category 3.
d. For category 1, Max_Category_Level is the larger of Max_Category_Level for category 1, Max_Category_Level for category 2, and Max_Category_Level for category 3.
e. If LAC > $10,000 and Category_Demands < 2/365, then set the Max_Category_Level to 0.

7. Calculate the total FSS Requirement and Allocation_Order. For each FSL do the following:
   a. Find the Temporary_Level (TLVL)
   TLVL = Larger of ARL and Max_Category_Level If LAC <= $45,000
   TLVL = ARL otherwise
   b. Check for Max Levels
   TLVL = Smaller of TLVL and Max ASL
   c. Check for Maximum Category Setting.
   TLVL = 0 if FSL Category > Max_Category
   d. Sum up the FSL Temporary_Levels
   FSS_Requirement = FSS_Requirement + TLVL
   e. Once all FSLs are summed, ensure FSS_Requirement is at least equal to the number of Category 1 FSLs.
   f. Determine the order in which to allocate levels to the FSLs. Allocation_Order is determined by 10*(4-Category)+DDR
   g. Determine Users. An FSL is a user unless it has a Max ASL=0 or unless the FSL Category > Max_Category. #_of_Users is just the number of FSLs that are determined to be users.

8. Assign the Primary Authorized_Level (Plevel) for each FSL
   a. If LAC <= $10,000, Then
   Plevel = Max_Category_Level for the FSL category
   b. Else
   Compute Initial_Level = Truncate [FSS_Requirement/#_of_Users]
   Plevel = Initial_Level provided FSL is a User
   Allocate the remaining levels (the truncated part of the Initial_Level) in Allocation_Order. Plevel = Plevel + 1 until the FSS_Requirement is reached

Note: Repeat this step for all FSLs

SECONDARY ALGORITHM

9. For each FSL, calculate MAJCOM_Anticipated_Required_Level (MARL)
   a. Pipeline = DDR * [(RCT*PBR + (1-PBR)*(OST+NCT)]
   b. Safety_Level = 1 * SQRT [3 * Pipeline]
   c. Calculate the Pipe_Demand_Level (PDL) as follows:

PDL = Pipeline + Safety_Level

d. Calculate the MAJCOM_Anticipated_Required_Level (MARL)

MARL = 0 if DDR = 0

MARL = Truncate (PDL + .9) if PDL < 1.0
MARL = Truncate (PDL + .5) otherwise

Note: Repeat this step for all the FSLs

10. Find the FSS MAJCOM_Anticipated_Required_Level (MARL)
    a. Find FSS-wide demand variables. DDR is summed for all FSLs to get DDR0, and the other variables (RCT, PBR, OST, NCT) are all weight averaged based on the number of demands to get RCT0, PBR0, OST0, and NCT0
    b. Pipeline = DDR0 * [(RCT0*PBR0 + (1-PBR0)*(OST0+NCT0)]
    c. Safety_Level = 1 * SQRT [3 * Pipeline]
    d. Calculate the Pipe_Demand_Level (PDL) as follows:
       PDL = Pipeline + Safety_Level
    e. Calculate the MAJCOM_Anticipated_Required_Level (MARL)
       MARL0 = 0 if DDR0 = 0
       MARL0 = Truncate (PDL + .9) if PDL < 1.0
       MARL0 = Truncate (PDL + .5) otherwise

11. Find the total number of category demands and maximum category level for each category and roll-up from lower categories
    a. Category_Demands = Sum of DDR for all FSLs in this category
    b. Category_Prorated_Level = Truncate
       [Category_Demands/DDR0*MARL0/#_FSLs_in_Category + .9999]
    c. Max_MCategory_Level = Largest of [Max of MARL for all FSLs in lower categories, Category_Prorated_Level, Category_Prorated_Level for lower categories]

12. Assign the Secondary_Authorized_Level (Slevel) for each FSL
    a. Slevel = Max [Max_MCategory_Level, MARL]
    b. Check for Max Levels
       Slevel = Smaller of Slevel and Max ASL
    c. Check for Maximum Category Setting.
       Slevel = 0 if FSL Category > Max_Category

Note: Repeat this step for all FSLs

FINAL LEVEL DETERMINATION

13. For each NON-FSL SRAN, calculate Non_FSL_Pipeline (Tpipe)
    a. Pipeline = DDR * [(RCT*PBR + (1-PBR)*(OST+NCT)]
    b. Tpipe = Fixed ASL If a Fixed ASL is present
    c. Tpipe = Max [Min ASL, ISSL, Min (Pipeline, Max ASL)] otherwise
    d. Sum Tpipe for all NON-FSL SRANs

14. Compute the safety amount.
    a. Obtain the D041 requirement (Req)

b. Subtract the Non_FSL_Pipline (Tpipe)
Safety = Req - Tpipe
c. Subtract all the levels allocate by the Primary algorithm (Plevel)

Safety = Safety – Sum of [Plevel]

15. For each FSL, compute the Initial value for the final level (ALL_Lvl) and the Extra amount
a. ALL_Lvl = Plevel
b. Extra = Max [0, Slevel – Plevel]
c. Tot_Extra = Sum of [Extra]

Note: repeat this step for all FSLs

16. Allocate the safety amount
a. If the Safety quantity >= Tot_Extra, then
ALL_Lvl = ALL_Lvl + Extra
b. If not, allocate the safety level, 1 at a time based on
Tbest = Extra / (Slevel + Category) – ALL_Level*.000001
The FSL with the largest Tbest value is allocated the level (ALL_Lvl = ALL_Lvl + 1 for that FSL). Tbest is then recalculated to allocate the next safety level. This continues until the entire safety amount is allocated.

OUTPUT RESULTS

17. AMCLVLS File. ALL_Lvl (the amount allocated) is modified by any FSL reported ASLs (AMC_Lvl). Requirement Level (Req_Lvl) is also computed.
a. If Fixed ASLs are reported,
ALL_Lvl = Fixed Level
AMC_Lvl = Fixed Level
Req_Lvl = Fixed Level
b. If Min ASLs are reported,
ALL_Lvl = Max [Min/ISSL Level, ALL_Lvl]
AMC_Lvl = Min/ISSL Level
Req_Lvl = Max [Min/ISSL Level, Plevel]
c. If Max ASLs are reported, ALL_Lvl already accounts for them
AMC_Lvl = 0
Req_Lvl = Plevel
d. If No FSL ASLs are reported, ALL_Lvl is correct
AMC_Lvl = 0
Req_Lvl = Plevel
e. Output ALL_Lvl and AMC_Lvl to AMCLVLS file

18. AMC72M File. Req_Lvl, AMC_Lvl, and Plevel are reported.

19. AMCXE4 File. Req_Lvl is reported.

20. For the remainder of the RBL run, for each FSL
    a. Fixed ASLs = ALL_Lvl
    b. Min ASL = 0, ISSL = 0, Max ASL = 9999
    c. This may require inserting a SRAN that does not exist in the RBL input file

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APPENDIX B
EXAMPLE 72M REPORT

This appendix shows an example output file for AFMC ALCs as ASL justification (File Name: AMC72M). This file will be sent via FTP to each of the 5 ALCs using address, userid, and password as provided by AMC. This file replaces the 72M report and provides the necessary documentation for "approved" FSL levels. The output file is shown below after the definitions.

AMC72M

Element Format	Fields	Data Element
A3	1-3	Document Identifier ("72M")
A3	4-6	PSP Routing Identifier
A15	7-21	Family Master NSN
A3	22-24	Standard Reporting Designator (SRD)
A6	25-30	Supporting PSP SRAN
A6	31-36	FSL SRAN
I4	37-40	FSL Adjusted Level (to pass to D041)
I5	41-45	FSL Daily Demand Rate (DDR) – 4 decimal digits assumed
I2	46-47	Percent Base Repair (PBR) – 2 decimal digits assumed
1X	48	Space
I2	49-50	Repair Cycle Time (RCT)
1X	51	Space
A4	52-55	Date Field – Not currently filled
2X	56-57	Spaces
I4	58-61	FSL Provided Adjusted Stock Level
2X	62-63	Spaces
I4	64-67	FSL/RBL Algorithm Computed Level

Note: Columns 1-55 are the same format as current 72M.

Definitions:

FSL Adjusted Level (to pass to D041) – this is the adjusted level that will be passed to D041. It is the higher of the FSL/RBL Algorithm Computed Level or the FSL provided ASL.
FSL Provided Asjusted Stock Level – this is a level loaded at the FSL by the user. It will override the FSL/RBL Algorithm Computed Level.
FSL/RBL Algorithm Computed Level – This is the level computed using the FSL algorithm in RBL.

Example 72M Output Report

```
72MDJN6610000180682UCAC2FB4497FB4401   1 0023 0  0 xxxx     0     1
72MDKZ6610000180682UCAC2FB4427FB4405   1 0072 0  0 xxxx     0     1
72MDJN6610000180682UCAC2FB4497FB4406   1 0043 0  0 xxxx     0     1
72MDJN6610000180682UCAC2FB4497FB4409   1 0000 0  0 xxxx     0     1
72MDJN6610000180683UCAC2FB4497FB4401   1 0091 0  0 xxxx     0     1
72MDKZ6610000180683UCAC2FB4427FB4405   1 0161 0  0 xxxx     0     1
72MDJN6610000180683UCAC2FB4497FB4406   1 0046 0  0 xxxx     0     1
72MDJN6610000180683UCAC2FB4497FB4409   1 0000 0  0 xxxx     0     1
72MDJN1680000264424UCAC2FB4497FB4401   1 0000 0  0 xxxx     0     1
72MDKZ1680000264424UCAC2FB4427FB4405   1 0000 0  0 xxxx     0     1
72MDJN1680000264424UCAC2FB4497FB4409   1 0000 0  0 xxxx     0     1
72MDJN5831000523404  AC2FB4497FB4401   1 0055 0  0 xxxx     0     1
72MDKZ5831000523404  AC2FB4427FB4405   1 0026 0  0 xxxx     0     1
72MDJN5831000523404  AC2FB4497FB4406   1 0000 0  0 xxxx     0     1
72MDKZ5831000523404  AC2FB4427FB4408   1 0055 0  0 xxxx     0     1
72MDJN5831000523404  AC2FB4497FB4409   1 0000 0  0 xxxx     0     1
72MDKZ5831000523404  AC2FB4427FB4411   1 0000 0  0 xxxx     0     1
72MDBY6615000682588JHAALFB4484FB4401   1 0000 0  0 xxxx     0     1
72MDJ56615000682588JHAALFB4479FB4405   1 0055 0  0 xxxx     0     1
72MDBY1560000744238JHAALFB4484FB4401   1 0000 0  0 xxxx     0     1
72MDJ51560000744238JHAALFB4479FB4405   1 0000 0  0 xxxx     0     1
72MDBY1560000744238JHAALFB4484FB4406   1 0028 0  0 xxxx     0     1
72MDJ51560000744238JHAALFB4479FB4408   1 0055 0  0 xxxx     0     1
72MDBY1560000744238JHAALFB4484FB4409   1 0000 0  0 xxxx     0     1
72MDJ51560000744238JHAALFB4479FB4411   1 0000 0  0 xxxx     0     1
72MDJN6220000886792UCAC2FB4497FB4400   1 0000 0  0 xxxx     0     1
72MDJN6220000886792UCAC2FB4497FB4401   1 0068 0  0 xxxx     0     1
72MDJN6220000886792UCAC2FB4497FB4402   1 0000 0  0 xxxx     0     1
72MDJN6220000886792UCAC2FB4497FB4403   1 0055 0  0 xxxx     0     1
72MDKZ6220000886792UCAC2FB4427FB4405   1 0000 0  0 xxxx     0     1
72MDJN6220000886792UCAC2FB4497FB4406   1 0026 0  0 xxxx     0     1
72MDKZ6220000886792UCAC2FB4427FB4408   1 0000 0  0 xxxx     0     1
72MDJN6220000886792UCAC2FB4497FB4409   1 0000 0  0 xxxx     0     1
72MDKZ6220000886792UCAC2FB4427FB4411   1 0000 0  0 xxxx     0     1
72MDKZ6220000886792UCAC2FB4427FB4415   1 0000 0  0 xxxx     0     1
72MDKZ6220000886792UCAC2FB4427FB4480   1 0000 0  0 xxxx     0     1
72MDJN5895000894521  AC2FB4497FB4401   1 0000 0  0 xxxx     0     1
72MDKZ5895000894521  AC2FB4427FB4405   1 0000 0  0 xxxx     0     1
72MDJN5895000894521  AC2FB4497FB4409   1 0000 0  0 xxxx     0     1
72MDJN1650000984775UCAC2FB4497FB4401   1 0023 0  1 xxxx     0     1
72MDKZ1650000984775UCAC2FB4427FB4405   1 0000 0  0 xxxx     0     1
72MDJN1650000984775UCAC2FB4497FB4406   1 0050 0  1 xxxx     0     1
72MDKZ1650000984775UCAC2FB4427FB4408   1 0000 0  0 xxxx     0     1
72MDJN1650000984775UCAC2FB4497FB4409   1 0000 0  1 xxxx     0     1
72MDKZ1650000984775UCAC2FB4427FB4411   1 0000 0  1 xxxx     0     1
72MDJN6610001063401UCAC2FB4497FB4401   1 0000 0  0 xxxx     0     1
72MDKZ6610001063401UCAC2FB4427FB4405   1 0000 0  0 xxxx     0     1
72MDJN6610001063401UCAC2FB4497FB4406   1 0033 0  0 xxxx     0     1
72MDKZ6610001063401UCAC2FB4427FB4408   1 0000 0  0 xxxx     0     1
72MDJN6610001063401UCAC2FB4497FB4409   1 0000 0  0 xxxx     0     1
72MDKZ6610001063401UCAC2FB4427FB4411   1 0000 0  0 xxxx     0     1
72MDJN1680001115773UCAC2FB4497FB4401   1 0000 0  0 xxxx     0     1
72MDKZ1680001115773UCAC2FB4427FB4405   1 0000 0  0 xxxx     0     1
72MDJN1680001115773UCAC2FB4497FB4406   1 0052 0  0 xxxx     0     1
72MDKZ1680001115773UCAC2FB4427FB4408   1 0000 0  0 xxxx     0     1
```

APPENDIX C
EXAMPLE REVIEW REPORT OUTPUT

In this appendix, we describe the RBL products to identify potential problems where RBL is not meeting AMC's FSL requirements. RBL produces standardized problem item reports that identifies items to the IMSs for their action. In addition, the AFLMA produces two RBL reports providing products identifying FSL items to review (examples are provided in this appendix). The RBL Review Summary Report summarizes several review item types. The list will include the number of FSL-caused problem items, which are items that would not be a problem item without FSL requirements. These are items, where the D041 worldwide requirement does not include FSL requirements. The report identifies the number of each type of problem item—N, Z, A and H—for FSL items.

Furthermore, the AFLMA produced RBL report provides a Detailed Review file (REVIEWF.DAT) for just the FSL caused problem items. This file provides a worldwide view of the FSL problem items.

The AFLMA produced RBL reports will be run quarterly (after RBL is run but before the levels are provided) and will be available on the AFMC RBL/FTP web page. AMC should work closely with the Air Force Requirements Team and the IMSs to ensure these items are corrected—and the FSL requirements are included in D041.

EXAMPLE REVIEW DETAIL REPORT OUTPUT

******** RBL Review Summary Report ******** Analysis Performed on: 26 Jan 1999
Input File Name: O:\Lgy-RBL\Data\99020\Cls1.txt_ CLS File Date: 99020

========== SUMMARY STATISTICS ==========

Total # of NIINs =	99410
# of NIINs Pushed =	97765
# of NIINs to be reviewed =	3868
Total # of SRAN Records (Cases) =	407285
# of Cases Pushed =	394538
# of Cases to be reviewed =	47857

========== ITEMS TO BE REVIEWED ==========
(Data File Path: O:\Lgy-RBL\Data\99020_)

Item	Review	Data File
I	ISSL Caused Problem Item (non-trivial items)	REVIEWI.DAT
E	EBO > 4 and Levels Pushed	REVIEWE.DAT
F	**FSL Caused Problem Item, (non-trivial items)**	**REVIEWF.DAT**
T	True Insurance Items with ASLs	REVIEWT.DAT
R	Insurance Cataloging Concerns	REVIEWR.DAT
L	RBL > Computed RCDL + 20 and Levels Pushed	REVIEWL.DAT
S	NSO Cataloging Concerns	REVIEWS.DAT
A	Potentially Incorrect Additive ASLs	REVIEWA.DAT

========== NIINs TO BE REVIEWED ==========

---------- Model/Algorithm/Data Concerns ----------

Item	Count	N	Z	A	H	T	*	Y	I	No Flags
E	127	0	0	0	19	0	0	0	5	103
L	196	0	0	0	0	0	0	0	0	196
F	**33**	**7**	**4**	**10**	**12**	**0**	**0**	**0**	**0**	**0**
Misc	343	7	4	10	29	0	0	0	5	288

---------- Policy Concerns ----------

Item	Count	N	Z	A	H	T	*	Y	I	No Flags
T	61	0	0	0	0	0	45	0	0	16
R	376	1	1	4	5	12	31	0	1	321
S	1115	93	66	28	5	14	129	0	59	721
I	995	0	0	0	0	0	0	0	995	0
A	1153	27	33	63	27	58	63	0	16	866
Policy	3149	113	92	89	31	69	192	0	995	1568

FSL Caused Problem Items

Review Code	Flag	NSN	SRAN	C	DDR	OST	RCT	PBR	Depot Mean	Base Mean	Heur Pipe	ISSL	Min ASL
F	H	1660001324132	DEPOT		0.04408		16		0.71	1.14	7.36		
F	H	1660001324132	FB2053	1	0.0071	5	4	0		0.05	0.05	0	0
F	H	1660001324132	FB2059	1	0	8	4	0		0	0	0	0
F	H	1660001324132	FB4401	1	0	9	4	0		0	0	0	0
F	H	1660001324132	FB4403	1	0	9	4	0		0	1	0	0
F	H	1660001324132	FB4405	1	0	3	4	0		0	1	0	0
F	H	1660001324132	FB4406	1	0.0055	3	4	0		0.03	1	0	0
F	H	1660001324132	FB4408	1	0	9	4	0		0	0	0	0
F	H	1660001324132	FB4409	1	0.0111	5	4	0		0.08	1	0	0
F	H	1660001324132	FB4411	1	0	4	4	0		0	1	0	0
F	H	1660001324132	FB4415	1	0.0053	4	4	0		0.03	1	0	0
F	H	1660001324132	FB4419	1	0.0111	5	4	0		0.08	0.08	0	0
F	H	1660001324132	FB4427	1	0.0357	5	4	0.99		0.14	0.14	0	0
F	H	1660001324132	FB4480	1	0	9	4	0		0	0	0	0
F	H	1660001324132	FB4497	1	0.0645	5	6	0.95		0.39	0.39	0	0
F	H	1660001324132	FB6322	1	0.0105	5	5	0.99		0.05	0.05	0	0
F	H	1660001324132	FB6606	1	0.0292	5	10	0.99		0.29	0.29	0	0
F	A	2915001558098	DEPOT		0.0503		32		1.61	0.5	6.47		
F	A	2915001558098	FB2059	1	0	18	4	0		0	0	0	0
F	A	2915001558098	FB2065	1	0.0069	8	10	0		0.07	0.07	0	0
F	A	2915001558098	FB4401	1	0.0055	4	4	0		0.03	1	0	0
F	A	2915001558098	FB4403	1	0.0045	9	4	0		0.05	1	0	0
F	A	2915001558098	FB4405	1	0	9	4	0		0	1	0	0
F	A	2915001558098	FB4406	1	0.0055	9	4	0		0.06	1	0	0
F	A	2915001558098	FB4408	1	0	9	4	0		0	0	0	0
F	A	2915001558098	FB4409	1	0	9	4	0		0	1	0	0
F	A	2915001558098	FB4418	1	0.0111	10	6	0.99		0.07	0.07	0	0
F	A	2915001558098	FB4419	1	0	6	4	0		0	0	0	0
F	A	2915001558098	FB4425	1	0	5	4	0		0	0	0	0
F	A	2915001558098	FB4479	1	0.0166	5	4	0		0.12	0.12	0	0
F	A	2915001558098	FB4480	1	0.0111	3	4	0		0.06	0.06	0	0
F	A	2915001558098	FB4484	1	0.0048	5	1	0.99		0.01	0.01	0	0
F	A	2915001558098	FB4497	1	0	6	4	0		0	0	0	0
F	A	2915001558098	FB6242	1	0.0044	5	10	0.99		0.04	0.04	0	0
F	A	1650001690950	DEPOT		0.16452		19		3.13	1.49	29.26		
F	A	1650001690950	FB2039	1	0	0	0	0		0	0	0	0
F	A	1650001690950	FB2049	1	0	5	4	0		0	0	0	0
F	A	1650001690950	FB2065	1	0.0466	6	1	0		0.37	24	0	24
F	A	1650001690950	FB2300	1	0.0053	5	4	0		0.04	0.04	0	0
F	A	1650001690950	FB4400	1	0	0	0	0		0	0	0	0
F	A	1650001690950	FB4401	1	0	9	4	0		0	0	0	0
F	A	1650001690950	FB4405	1	0	9	4	0		0	0	0	0

Fixed ASL	Min CSSL	Fixed CSSL	Total ASL	Max ASL	RCDL	RCDL & 20	RBL	Req	EBO	RIC	IMC	INS	BP	SMC	# of SRANs
			6				0	7	1.1553	FHP	C2C		15	410A	16
0	0	0	0	9999	1	21	0		0.1633	FHP	C2C				
0	0	0	0	9999	0	20	0		0	FHP	C2C				
0	0	0	0	9999	0	20	0		0	FHP	C2C				
1	0	0	1	9999	0	21	1		0	FHP	C2C				
1	0	0	1	9999	0	21	1		0	FHP	C2C				
1	0	0	1	9999	1	21	1		0.0064	FHP	C2C				
0	0	0	0	9999	0	20	0		0	FHP	C2C				
1	0	0	1	9999	1	21	1		0.0421	FHP	C2C				
1	0	0	1	9999	0	21	1		0	FHP	C2C				
1	0	0	1	9999	0	21	1		0.0065	FHP	C2C				
0	0	0	0	9999	1	21	0		0.2553	FHP	C2C				
0	0	0	0	9999	1	21	0		0.1496	FHP	C2C				
0	0	0	0	9999	0	20	0		0	FHP	C2C				
0	0	0	0	9999	1	21	1		0.1819	FHP	C2C				
0	0	0	0	9999	1	21	0		0.0544	FHP	C2C				
0	0	0	0	9999	1	21	0		0.2958	FHP	C2C				
			5				0	3	1.5345	FPP	3AC		15	476L	16
0	0	0	0	9999	0	20	0		0	FPP	3AC				
0	0	0	0	9999	1	21	0		0.2898	FPP	3AC				
1	0	0	1	9999	1	21	1		0.0204	FPP	3AC				
1	0	0	1	9999	0	21	1		0.0176	FPP	3AC				
1	0	0	1	9999	0	21	1		0	FPP	3AC				
1	0	0	1	0	1	21	1		0.0259	FPP	3AC				
0	0	0	0	9999	0	20	0		0	FPP	3AC				
1	0	0	1	9999	0	21	1		0	FPP	3AC				
0	0	0	0	9999	1	21	0		0.0708	FPP	3AC				
0	0	0	0	9999	0	20	0		0	FPP	3AC				
0	0	0	0	9999	0	20	0		0	FPP	3AC				
0	0	0	0	9999	1	21	0		0.6474	FPP	3AC				
0	0	0	0	0	1	21	0		0.4107	FPP	3AC				
0	0	0	0	9999	0	20	0		0.0066	FPP	3AC				
0	0	0	0	9999	0	20	0		0	FPP	3AC				
0	0	0	0	9999	0	20	0		0.0453	FPP	3AC				
			26				2	24	0.5595	FHP	C4B		15	476L	21
0	0	0	0	9999	0	20	0		0	FHP	C4B				
0	0	0	0	9999	0	20	0		0	FHP	C4B				
0	0	0	24	9999	1	44	11		0.0002	FHP	C4B				
0	0	0	0	9999	0	20	1		0.004	FHP	C4B				
0	0	0	0	9999	0	20	0		0	FHP	C4B				
0	0	0	0	9999	0	20	0		0	FHP	C4B				
0	0	0	0	9999	0	20	0		0	FHP	C4B				

Appendix D
Example AMC REQ File

ASL	NSN	SRAN	QTY
FSLASL6610000180682UC	FB4401	1	
FSLASL6610000180682UC	FB4405	1	
FSLASL6610000180682UC	FB4406	1	
FSLASL6610000180682UC	FB4409	1	
FSLASL6610000180683UC	FB4401	1	
FSLASL6610000180683UC	FB4405	1	
FSLASL6610000180683UC	FB4406	1	
FSLASL6610000180683UC	FB4409	1	
FSLASL1680000264424UC	FB4401	1	
FSLASL1680000264424UC	FB4405	1	
FSLASL1680000264424UC	FB4409	1	
FSLASL5831000523404	FB4401	1	
FSLASL5831000523404	FB4405	1	
FSLASL5831000523404	FB4406	1	
FSLASL5831000523404	FB4408	1	
FSLASL5831000523404	FB4409	1	
FSLASL5831000523404	FB4411	1	
FSLASL6615000682588JH	FB4401	1	
FSLASL6615000682588JH	FB4405	1	
FSLASL1560000744238JH	FB4401	1	
FSLASL1560000744238JH	FB4405	1	
FSLASL1560000744238JH	FB4406	1	
FSLASL1560000744238JH	FB4408	1	
FSLASL1560000744238JH	FB4409	1	
FSLASL1560000744238JH	FB4411	1	
FSLASL6220000886792UC	FB4400	1	
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